1. (10 points) Draw Lewis dot structures for each of the following:

\[ \text{H} - \text{C} - \text{O} - \text{O} - \text{H} \]
\[ \text{H} - \text{N} - \text{O} - \text{O} - \text{H} \]

2. (10 points) How many monobromo derivatives of A are there? Draw each of them. Do not count rotational isomers.

A

3. (10 points) Which would have a higher net dipole moment, B or C? Why?

\[ \text{Cl} \quad \text{Cl} \]
\[ \text{H} - \text{C} - \text{H} \]
\[ \text{Cl} \quad \text{Cl} \]
\[ \text{Cl} - \text{Cl} \]

B

C